Met Office CHEMET Forecast

Middlesborough GasRelease CHEMET 743_001

Issued by Met Office Environment Monitoring and Response Centre (EMARC)

Tel: 01392 447947 Email: emarc@metoffice.gov.uk Link to Hazard Manager

Plume forecast below 100m - map will be sent separately

Forecast Issued on Friday, 01 July 2022 at 18:34 local

To: Duty Officer	**Organisation:** Cleveland FRS
Tel: 01429 874060	**Email:** cfbcontrol@clevelandfire.gov.uk

Forecast for: Middlesborough **Nature of Incident:** GasRelease

Incident ongoing since: 01/07/2022 18:00

Forecast valid between: 18:00 01/07/2022 *and* 00:00 02/07/2022

Surface wind direction/speed: *Blowing from SSW towards NNE at 7 mph.*
Changes to blowing from S towards N at from 22:00.

Weather conditions and effect on plume: Moderate horizontal dispersion towards the north-northeast, gradually moving towards the north after 22:00. Vertical dispersion slowing over the next two hours, with plume then help close to the ground for the remainder of the period. Isolated showers in the area therefore a small chance of washout.

If incident continues beyond the validity period, the following weather conditions will affect the plume

Plume dispersing towards the north for the remainder of the night. Vertical dispersion likely to be variable. Prolonged rainfall is expected towards the end of the night with washout likely.

Please call 01392 447947 to request further updates if this incident is likely to continue or to discuss further.

Additional Information for Science and Health Agencies

Precipitation (type and intensity): Isolated rain showers.

Total Cloud amount: 5 oktas

Height of lowest significant cloud: 3000 feet

Air temperature: 17 becoming 15 °C

Relative humidity: 65 %

Depth of mixing layer: 700 becoming 200 metres

Wind at top of mixing layer: Blowing from 240 to 060 degrees at 35 km/h changes to blowing from 200 to 020 degrees at 60 km/h

Air stability: E *(A=unstable, G=stable)*

Latitude and Longitude of source: 54.6062 N, 1.1485 W

Sensible heat flux: -2 W/m^2

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